

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A method of allocating an Internet Protocol (IP) address and detecting duplication of the IP address in a network environment, comprising the steps of:

allocating an initial IP address to a terminal;
sending and receiving broadcast messages;
detecting duplication of the IP address while sending and receiving the broadcast messages;

updating a Duplicate Address Detection (DAD) table through searches of at least one of a DAD table and a history table; and

determining whether a collision of the IP address occurs using a DAD timer handler.

2. (original): The method according to claim 1, wherein the network environment is an ad-hoc network environment.

3. (original): The method according to claim 1, wherein said terminal allocates said initial IP address to itself.

4. (original): The method according to claim 1, wherein said broadcast messages are one-hop broadcast messages.

5. (original): A method of allocating an Internet Protocol (IP) address and detecting duplication of the IP address in a network environment, comprising the steps:

(a) initially allocating a tentative IP address to a terminal;

(b) determining whether the tentative IP address can be used by the terminal;

- (c) comparing the tentative IP address with at least one other IP address;
 - (d) if the tentative IP address has a duplicate, selecting an advisory IP address that does not exist;
 - (e) sending the advisory IP address to the terminal;
 - (f) performing step (b) using the advisory IP address as the tentative IP address.
6. (original): The method according to claim 5, wherein said terminal allocates the tentative IP address to itself.
7. (original): The method according to claim 5, wherein the network environment is an ad-hoc environment.
8. (original): The method according to claim 5, wherein the network environment has no central server.
9. (original): The method according to claim 5, wherein said at least one other IP address is located in a duplicate address detection (DAD) table.
10. (original): The method according to claim 9, wherein the advisory IP address does not exist in said DAD table.
11. (currently amended): The method according to claim 5, wherein a neighboring mobile terminal selects the advisory IP address.